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(FILE 'USPAT' ENTERED AT 10:05:41 ON 24 MAR 93)

L1 25190 S 430/1-350/CCLST
L2 36547 S TWO DIMENSIONAL OR TWO-DIMENSIONAL OR TWO(P)DIMENSIONAL
L3 515 S L1 AND L2
L4 277 S L3 AND RADIATION
L5 277 S L4 AND (METHOD? OR PROCESS?)
L6 849 S HORSERADISH AND (PARTICLE# OR POWDER#)
L7 4 S L6 AND SPRAY AND TOPICALLY

=> s 15 and mask.

49929 MASK

L8 110 L5 AND MASK

=> s 18 and substrate

151865 SUBSTRATE

L9 93 L8 AND SUBSTRATE

=> s 19 and mask image

49929 MASK

155587 IMAGE

471 MASK IMAGE

(MASK(W)IMAGE)

L10 6 L9 AND MASK IMAGE

=> d cit 1-6

1. 5,178,976, Jan. 12, 1993, Technique for preparing a photo- mask for imaging three-dimensional objects; James W. Rose, et al., 430/5 ; 264/220, 247; 430/318 , 322 [IMAGE AVAILABLE]

2. 5,153,084, Oct. 6, 1992, Process for preparing a photo- mask for imaging three-dimensional objects; Donald Franklin Foust, et al., 430/5 ; 264/271.1, 279; 430/270 [IMAGE AVAILABLE]

3. 5,141,829, Aug. 25, 1992, Method of preparing a photo- mask for imaging three-dimensional objects; William V. Dumas, et al., 430/5 ; 427/96, 99; 430/313 , 315 [IMAGE AVAILABLE]

4. 5,043,251, Aug. 27, 1991, Process of three dimensional lithography in amorphous polymers; Mark F. Sonnenschein, et al., 430/297 , 321 , 396, 944, 945 [IMAGE AVAILABLE]

5. 4,898,804, Feb. 6, 1990, Self-aligned, high resolution resonant dielectric lithography; Kurt Rauschenbach, et al., 430/311 , 30 , 314 , 322 , 325 , 327 ; 437/180, 229

6. 4,356,254, Oct. 26, 1982, Image-forming method using o-quinone diazide and basic carbonium dye; Yohnosuke Takahashi, et al., 430/296 , 5 , 165 , 166 , 190 , 191 , 294 , 299 , 309 , 320 , 323 , 325 , 326 , 330 , 945

=> s 110 and rayleigh

1620 RAYLEIGH

L11 0 L10 AND RAYLEIGH

=> s 19 and rayleigh

1620 RAYLEIGH
L12 1 L9 AND RAYLEIGH

=> d cit

1. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

=> s 11 and rayleigh

1620 RAYLEIGH
L13 12 L1 AND RAYLEIGH

=> s 113 and 12

L14 2 L13 AND L2

=> d cit 1-2

1. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

2. 4,272,186, Jun. 9, 1981, Camera method and apparatus for recording with selected contrast; William T. Plummer, 355/34, 38, 68, 71, 77; 430/236, 391, 396 [IMAGE AVAILABLE]

=> !

=> s 14 and 114

L15 1 L4 AND L14

=> d cit

1. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

=> s 4379831/pn

L16 1 4379831/PN

=> s 116 and 11

L17 1 L16 AND L1

=> d kwic

US PAT NO: 4,379,831 [IMAGE AVAILABLE] L17: 1 of 1
US-CL-CURRENT: 430/311; 355/27, 30; 430/273, 325, 326,
327, 396, 950

=> s 116 and 12

L18 0 L16 AND L2

=> s 116 and two(p)dimensional

1280178 TWO

98007 DIMENSIONAL

36547 TWO(P)DIMENSIONAL

L19 0 L16 AND TWO(P)DIMENSIONAL

=> s 12 and semiconductor

88300 SEMICONDUCTOR

L20 4830 L2 AND SEMICONDUCTOR

=> s 120 and 11

L21 110 L20 AND L1

=> s transfer? pattern?

380166 TRANSFER?

234836 PATTERN?

=>
=> s transfer? pattern?
 380166 TRANSFER?
 234836 PATTERN?
L23 396 TRANSFER? PATTERN?
 (TRANSFER?(W) PATTERN?)

=> s 123 and 13
L24 5 L23 AND L3

=> d cit 1-5

1. 4,883,359, Nov. 28, 1989, Alignment method and pattern forming method using the same; Hideki Ina, et al., 356/401; 355/77; 430/22 [IMAGE AVAILABLE]

2. 4,855,197, Aug. 8, 1989, Mask for ion, electron or X-ray lithography and method of making it; Werner Zapka, et al., 430/5; 156/643, 662; 250/492.2, 505.1; 378/35; 430/313, 323, 966

3. 4,788,127, Nov. 29, 1988, Photoresist composition comprising an interpolymer of a silicon-containing monomer and an hydroxystyrene; David B. Bailey, et al., 430/192, 165, 166, 167, 197, 270, 271, 272, 312, 313, 323

4. 4,719,161, Jan. 12, 1988, Mask for X-ray lithography and process for producing the same; Takeshi Kimura, et al., 430/5; 378/35; 430/296, 325, 327, 330, 942, 947, 966

5. 4,591,540, May 27, 1986, Method of transferring a pattern into a radiation-sensitive layer; Harald Bohlen, et al., 430/22, 296, 311, 394, 396

=> s 123 and radiation
 118186 RADIATION
L25 113 L23 AND RADIATION

=> s 124 and radiation
 118186 RADIATION
L26 4 L24 AND RADIATION

=> s 126 and rayleigh
 1620 RAYLEIGH
L27 0 L26 AND RAYLEIGH

=> s 126 and mask
 49929 MASK
L28 4 L26 AND MASK

=> s 126 and semiconductor
 88300 SEMICONDUCTOR
L29 4 L26 AND SEMICONDUCTOR

=> s 126 and substrate
 151865 SUBSTRATE
L30 4 L26 AND SUBSTRATE

=> s 130 and mask image
 49929 MASK
 155587 IMAGE
 471 MASK IMAGE
 (MASK(W) IMAGE)
L31 0 L30 AND MASK IMAGE

=>

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=> s two edges
    1280178 TWO
        319742 EDGES
L1        6002 TWO EDGES
          (TWO(W) EDGES)
```

=> s two images
1280178 TWO
71212 IMAGES
L2 3190 TWO IMAGES
(TWO(W) IMAGES)

=> s 11 and 12

=> s 13 and (ultraviolet or uv)
47484 ULTRAVIOLET
28734 UV
L4 2 L3 AND (ULTRAVIOLET OR UV)

=> d sit 1

1. 5,051,585, Sep. 24, 1991, Apparatus and method of pattern detection based on a scanning transmission electron microscope; Hiroya Koshishiba, et al., 250/306, 310, 311 [IMAGE AVAILABLE]

$\Rightarrow 1-2$
 $'1-2'$ IS NOT A P

=>
=> d cit 14 1-2

1. 5,051,585, Sep. 24, 1991, Apparatus and method of pattern detection based on a scanning transmission electron microscope; Hiroya Koshishiba, et al., 250/306, 310, 311 [IMAGE AVAILABLE]

2. 4,534,288, Aug. 13, 1985, Method and apparatus for registering overlapping printed images; Yakov Z. Brovman, 101/211, 181

=> s 430/1-350/cclst
L5 25207 430/1-350/CCLST (351 TERMS)
(430/1+NEXT350/CCLST)

=> s 12 and 15

=> s 16 and (ultraviolet or uv)
47484 ULTRAVIOLET
28734 UV

¹⁰ See, e.g., *U.S. v. Ladd*, 100 F.3d 1250, 1254 (11th Cir. 1996) (noting that the *Brink's* rule is not limited to the *Brink's* case).

11965 PHOTOLITHOGRAPH?

10031 LITHOGRAPH?

L8 7 L7 AND (PHOTOLITHOGRAPH? OR LITHOGRAPH?)

=> d cit 1-7

1. 5,130,213, Jul. 14, 1992, Device manufacture involving
lithographic processing; Steven D. Berger, et al., 430/4, 5,
296, 311, 395, 396 [IMAGE AVAILABLE]

2. 4,835,088, May 30, 1989, Method and apparatus for generating
high-resolution images; Greysen Gilson, 430/323; 156/643; 250/492.3;
359/29, 558; 427/555; 430/1, 269, 311, 322; 437/20, 229

3. 4,347,479, Aug. 31, 1982, Test methods and structures for
semiconductor integrated circuits for electrically determining certain
tolerances during the photolithographic steps; Rene Cullet, 324/716,
158R, 706, 719; 430/30

4. 4,144,067, Mar. 13, 1979, Light-sensitive copying material and method
for the production of colored relief images; Hans Ruckert, et al.,
430/324, 175

5. 4,097,279, Jun. 27, 1978, Process for preparing an identification
card; Edwin Nelson Whitehead, 430/39; 156/233, 234, 240, 277; 283/77,
109, 112; 355/40; 359/2, 3, 900; 427/145, 146, 180, 197; 430/252
[IMAGE AVAILABLE]

6. 3,752,072, Aug. 14, 1973, PROCESS FOR REPRODUCING A FULL-COLOR
PICTURE IN ONE IMPRESSION; Leslie H. Lorber, 101/211, 401.1, 450.1;
430/6, 301

7. 3,650,746, Mar. 21, 1972, DUAL IMAGE FORMATION ON SEPARATE SUPPORTS
OF PHOTOCURABLE COMPOSITION; Robert J. Bailey, 430/252; 257/680;
430/288, 322

=> s 18 and two dimensional

1280178 TWO

98007 DIMENSIONAL

23279 TWO DIMENSIONAL

(TWO(W)DIMENSIONAL)

L9 0 L8 AND TWO DIMENSIONAL

=> s 18 and integrated circuit

138023 INTEGRATED

421344 CIRCUIT

55153 INTEGRATED CIRCUIT

(INTEGRATED(W)CIRCUIT)

L10 1 L8 AND INTEGRATED CIRCUIT

=> d cit

1. 4,835,088, May 30, 1989, Method and apparatus for generating
high-resolution images; Greysen Gilson, 430/323; 156/643; 250/492.3;
359/29, 558; 427/555; 430/1, 269, 311, 322; 437/20, 229

=> s 110 and substrate

151865 SUBSTRATE

L11 1 L10 AND SUBSTRATE

=> s 4835088/pn

L12 1 4835088/PN

=> s 112 and two images

1280178 TWO

71212 IMAGES

3190 TWO IMAGES

(TWO(W) IMAGES)

L13 1 L12 AND TWO IMAGES

=> 4

US PAT NO: 4,835,088

L14: 1 of 1

SUMMARY:

BSUM(S)

Still, it is possible to reduce the wavelength by employing shorter-wavelength photons, such as those associated with ultraviolet light or X-rays, or by employing beams of massive particles, such as electrons or ions, that have energies associated with. . .

=> s two images

1280178 TWO

71212 IMAGES

L15 3190 TWO IMAGES
(TWO(W) IMAGES)

=> s photolithograph? or lithograph?

11965 PHOTOLITHOGRAPH?

10031 LITHOGRAPH?

L16 20055 PHOTOLITHOGRAPH? OR LITHOGRAPH?

=> s 115 and 116

L17 96 L15 AND L16

=> s 117 and edges

319742 EDGES

L18 45 L17 AND EDGES

=> s 118 and 119

L19 8 L5 AND L18

=> s 119 asnd ultaviolet

MISSING OPERATOR 'L19 ASND'

=> s 119 and ultraviolet

47484 ULTRAVIOLET

L20 3 L19 AND ULTRAVIOLET

=> d cit i-3

1. 5,130,213, Jul. 14, 1992, Device manufacture involving lithographic processing; Steven D. Berger, et al., 430/4 , 5 , 296 , 311 , 395, 396 [IMAGE AVAILABLE]

2. 4,097,279, Jun. 27, 1978, Process for preparing an identification card; Edwin Nelson Whitehead, 430/39 ; 156/233, 234, 240, 277; 283/77, 109, 112; 355/40; 359/2, 3, 900; 427/145, 146, 180, 197; 430/252 [IMAGE AVAILABLE]

3. 3,650,746, Mar. 21, 1972, DUAL IMAGE FORMATION ON SEPARATE SUPPORTS OF PHOTOCURABLE COMPOSITION; Robert J. Bailey, 430/252 ; 257/680; 430/288 , 322

=> s 5130213/pn

L21 1 5130213/PN

=> s 121 and two images

1280178 TWO

71212 IMAGES

3190 TWO IMAGES

=> d kwic

US PAT NO: 5,130,213 [IMAGE AVAILABLE]

L22: 1 of 1

DETDESC:

DETD(67)

Optimal . . . number of factors may play a significant role. Desired image brightness, perhaps with a view to equality as between the two images , perhaps with a view to some prescribed ratio, perhaps with a view to specific exposure needs for the particular fabrication. . .

=> s l21 and edges

319742 EDGES

L23 1 L21 AND EDGES

=> d kwic

US PAT NO: 5,130,213 [IMAGE AVAILABLE]

L23: 1 of 1

DETDESC:

DETD(37)

The . . . simplify device fabrication. A recognized problem in processing a stepped surface is in maintaining thickness uniformity of resist on vertical edges . The problem may be avoided for properly selected electron acceleration voltages. Use of excess resist material, usually resulting in increasing thickness with depth but assuring reliable coating of vertical edges -presents little problem.

=> s l21 and ultraviolet

47484 ULTRAVIOLET

L24 1 L21 AND ULTRAVIOLET

=> d kwic

US PAT NO: 5,130,213 [IMAGE AVAILABLE]

L24: 1 of 1

SUMMARY:

BSUM(41)

A . . . built to minimum feature size of .about.1 .mu.m depends upon exposing and developing a resist layer by illumination with near ultraviolet radiation e.g. by means of an absorbing type mask. Both proximity printing and projection printing find use. Considerable thought and. . . feature size of .about.0.5 .mu.m) is expected to depend upon similar systems based on shorter wavelength illumination in the near ultraviolet spectrum. Requisites such as optics design and resist formulation, are at an advanced stage.

SUMMARY:

BSUM(42)

Amu.m, is not so well advanced. Some believe that lithographic delineation will depend upon shorter wavelength radiation in the deep ultraviolet spectrum.

SUMMARY:

BSUM(44)

It . . . in this category will rely upon further advances in mask

fabrication of devices. It is clear that wavelength limitations of ultraviolet radiation now in use make it unsuitable for imaging. While use of mask-to-image reduction permits passage of such radiation through. . .

DETDESC:

DETD(47)

The . . . the stated range. As an example, the facility for step coverage, or for expedient planarization processing may dictate preference to ultraviolet radiation, e.g. at 0.4 μ m design rules.

DETDESC:

DETD(56)

The . . . of proximity printing, is under extensive study for use in projection systems. Again, x-ray resists, registration techniques, etc. are known. Ultraviolet projection systems, both in the near UV and the vacuum UV spectra, are in use or under development.

=>

=> s 121 and micron

46541 MICRON

L25 1 L21 AND MICRON

=> d kwic

US PAT NO: 5,130,213 [IMAGE AVAILABLE]

L25: 1 of 1

ABSTRACT:

Fabrication of devices of micron and submicron minimum feature size is accomplished by lithographic processing involving a back focal plane filter. A particularly important fabrication. . .

SUMMARY:

BSUM(58)

Appropriate . . . energy forms are suitable from this standpoint. Inventive significance is primarily in terms of energy of properties inherently suited to micron and submicron feature size definition. A preferred system relies upon electrons sufficiently accelerated for appropriate fine feature resolution. Specific discussion. . .

DETDESC:

DETD(89)

Manufacturers . . . determine thickness of affected areas. In general, measurement equipment requires such an area. Experience dictates that fabrication based on the micron or submicron features of the invention requires about twice the specified dose (due to lessened proximity effect).

=> 3

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* W E L C O M E T O T H E *
* U. S. P A T E N T T E X T F I L E *
* *

=> s 430/1-975/cclst

'430/975' IS NOT A RECOGNIZED CLASS/SUBCLASS VALUE FOR RANGE SEARCHING.

=> s 430/1-950/cclst

WARNING - NUMBER OF UNIQUE TERMS TO BE ADDED MAY EXCEED LIMITS;
'430/1-950/CCLST' INTERPRETED AS: '430/1+NEXT499/CCLST OR 430/950+PREV
195/CCLST'.

30007 430/1+NEXT499/CCLST (500 TERMS)
15170 430/950+PREV195/CCLST (196 TERMS)

L1 36630 430/1-950/CCLST
(430/1+NEXT499/CCLST OR 430/950+PREV195/CCLST)

=> s ultaviolet or uv

83 ULTRAVIOLET

28734 UV

L2 28792 ULTRAVIOLET OR UV

=> s transfer? pattern

380166 TRANSFER?

208030 PATTERN

L3 286 TRANSFER? PATTERN
(TRANSFER? (W) PATTERN)

=> s 11 and 12

L4 3541 L1 AND L2

=> s 13 and 14

L5 12 L3 AND L4

=> s 15 and two image

1280178 TWO

155587 IMAGE

1538 TWO IMAGE

(TWO(W) IMAGE)

L6 @ L5 AND TWO IMAGE

=> s two(p)image?

1280178 TWO

168381 IMAGE?

L7 64673 TWO(P) IMAGE?

=> s 17 and two images

1280178 TWO

71212 IMAGES

3190 TWO IMAGES

(TWO(W) IMAGES)

L8 3190 L7 AND TWO IMAGES

=> s 11 and 18

L9 143 L1 AND L8

'A' IS NOT A RECOGNIZED COMMAND

=> s two(p)edges
1280178 TWO
319742 EDGES
L10 114756 TWO(P)EDGES

=> s l10 and two edges
1280178 TWO
319742 EDGES
6002 TWO EDGES
(TWO(W)EDGES)
L11 6002 L10 AND TWO EDGES

=> s 19 and 111
L12 2 L9 AND L11

=> d cit 1-2

1. 5,077,154, Dec. 31, 1991, Soft edge mask; Ferrand D. E. Corley,
430/4 ; 353/29, 30; 354/120; 355/70, 125; 430/333 , 394 ,
396 , 397 , 494 [IMAGE AVAILABLE]

2. 4,526,862, Jul. 2, 1985, Film-based dual energy radiography; Norbert
J. Pelc, 430/496 ; 850/475.2, 482.1; 430/139 , 502 , 503 ,
507 , 509 , 966, 967; 976/DIG.439 [IMAGE AVAILABLE]

=> s l12 and 12
L13 0 L12 AND L2

=> ♦
=> s l12 and 12
L13 0 L12 AND L2

=> s 17 and 110
L14 7256 L7 AND L10

=> s 114 and 11
L15 372 L14 AND L1

=> s 115 and 12
L16 65 L15 AND L2

=> s 116 and two(p)dimensional
1280178 TWO
98007 DIMENSIONAL
36547 TWO(P)DIMENSIONAL
L17 8 L16 AND TWO(P)DIMENSIONAL

=> s 117 and substrate
151865 SUBSTRATE
L18 6 L17 AND SUBSTRATE

=> s 118 and (photolithograph? or lithograph?)
11965 PHOTOLITHOGRAPH?
10031 LITHOGRAPH?
L19 4 L18 AND (PHOTOLITHOGRAPH? OR LITHOGRAPH?)

=> d cit 1-4

1. 4,898,804, Feb. 6, 1990, Self-aligned, high resolution resonant
dielectric lithography ; Kurt Rauschenbach, et al., 430/311 ,
30 , 314 , 322 , 325 , 327 ; 437/180, 229

2. 4,587,203, May 6, 1986, Wet process for developing styrene polymer

430/325 ; 427/372.2, 387, 510, 515, 555, 558; 430/270, 272, 311, 327, 330, 331, 954

3. 4,535,054, Aug. 13, 1985, Wet process for developing styrene polymer resists for submicron lithography; Robert G. Brault, et al., 430/325, 270, 331

4. 3,871,885, Mar. 18, 1975, CRYSTALLINE PHOTO-POLYMERIZABLE COMPOSITION; Walter Raymond Hertler, 430/281, 271, 283, 916, 923; 522/6, 9, 37, 39, 40, 43, 46, 63

=> s 11 and transfer?(p)pattern?

380166 TRANSFER?

234836 PATTERN?

20861 TRANSFER?(P)PATTERN?

L20 2430 L1 AND TRANSFER?(P)PATTERN?

=>

=> s 120 and 114

L21 49 L20 AND L14

=> s 121 and 12

L22 5 L21 AND L2

=> s 122 and substrate

151865 SUBSTRATE

L23 5 L22 AND SUBSTRATE

=> d cit 1-5

i. 5,051,329, Sep. 24, 1991, Reversal development of latent electrostatic images on xeroprinting masters; Edward B. Caruthers, et al., 430/100, 119 [IMAGE AVAILABLE]

2. 5,043,244, Aug. 27, 1991, Process for defined etching of substrates; Allan Cairncross, et al., 430/247, 205, 248, 314, 317 [IMAGE AVAILABLE]

3. 4,898,804, Feb. 6, 1990, Self-aligned, high resolution resonant dielectric lithography; Kurt Rauschenbach, et al., 430/311, 30, 314, 322, 325, 327; 437/180, 229

4. 4,647,524, Mar. 3, 1987, Transferring polymer from thin plastic films to photodevelop insulation patterns on printed wiring boards; Donald F. Sullivan, 430/312, 258, 260, 319, 935

5. 4,556,627, Dec. 3, 1985, Transferring polymer from thin plastic films to photodevelop insulation patterns on printed wiring boards; Donald F. Sullivan, 430/312; 156/212, 230, 241, 574; 430/257, 311, 319, 327, 394

=> e

*
* W E L C O M E T O T H E *
* U. S. P A T E N T T E X T F I L E *
*
=> s lithograph? or lithograph?(p)pattern?
 9941 LITHOGRAPH?
 9941 LITHOGRAPH?
 233101 PATTERN?
 3035 LITHOGRAPH?(P)PATTERN?
L1 9941 LITHOGRAPH? OR LITHOGRAPH?(P)PATTERN?

=> s 11 and rayleigh?
 1611 RAYLEIGH?
L2 32 L1 AND RAYLEIGH?

=> s 12 and image(p)mask?
 154159 IMAGE
 71699 MASK?
 10409 IMAGE(P)MASK?
L3 8 L2 AND IMAGE(P)MASK?

=> s 13 and (two-dimensional or two(p)dimensional)
 1272434 TWO
 97150 DIMENSIONAL
 23040 TWO-DIMENSIONAL
 (TWO(W)DIMENSIONAL)
 1272434 TWO
 97150 DIMENSIONAL
 36218 TWO(P)DIMENSIONAL
L4 2 L3 AND (TWO-DIMENSIONAL OR TWO(P)DIMENSIONAL)

=> d cit 1-2

1. 4,662,747, May 5, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 356/317; 359/368, 894 [IMAGE AVAILABLE]

2. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

=> d 13 cit 1-8

1. 5,079,600, Jan. 7, 1992, High resolution patterning on solid substrates; Joel M. Schnur, et al., 257/750, 629; 427/98, 553, 558 [IMAGE AVAILABLE]

2. 5,077,085, Dec. 31, 1991, High resolution metal patterning of ultra-thin films on solid substrates; Joel M. Schnur, et al., 427/98, 58, 510 [IMAGE AVAILABLE]

3. 5,022,061, Jun. 4, 1991, An image focusing means by using an opaque object to diffract x-rays; Gary E. Sommargren, et al., 378/84, 43 [IMAGE AVAILABLE]

4. 4,820,927, Apr. 11, 1989, Electron beam source employing a

5. 4,662,747, May 5, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 356/317; 359/368, 894 [IMAGE AVAILABLE]

6. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

7. 4,379,831, Apr. 12, 1983, Process for transferring a pattern onto a semiconductor disk; Ernst Lobach, 430/311; 355/27, 30; 430/273, 325, 326, 327, 396, 950 [IMAGE AVAILABLE]

8. 4,348,105, Sep. 7, 1982, Radiation shadow projection exposure system; Fausto Caprari, 355/67; 353/102 [IMAGE AVAILABLE]

=> s 14 and semiconductor?

90541 SEMICONDUCTOR?

L5 2 L4 AND SEMICONDUCTOR?

=> d cit 1-2

1. 4,662,747, May 5, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 356/317; 359/368, 894 [IMAGE AVAILABLE]

2. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

=> s 13 and semiconductor?

90541 SEMICONDUCTOR?

L6 8 L3 AND SEMICONDUCTOR?

=> s 13 and substrate?

160503 SUBSTRATE?

L7 7 L3 AND SUBSTRATE?

=> d cit 1-7

1. 5,079,600, Jan. 7, 1992, High resolution patterning on solid substrates; Joel M. Schnur, et al., 257/750, 629; 427/98, 553, 558 [IMAGE AVAILABLE]

2. 5,077,085, Dec. 31, 1991, High resolution metal patterning of ultra-thin films on solid substrates; Joel M. Schnur, et al., 427/98, 58, 510 [IMAGE AVAILABLE]

3. 5,022,061, Jun. 4, 1991, An image focusing means by using an opaque object to diffract x-rays; Gary E. Sommargren, et al., 378/84, 43 [IMAGE AVAILABLE]

4. 4,662,747, May 5, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 356/317; 359/368, 894 [IMAGE AVAILABLE]

5. 4,659,429, Apr. 21, 1987, Method and apparatus for production and use of nanometer scale light beams; Michael Isaacson, et al., 156/644, 643, 652, 655, 659.1; 355/78; 430/5, 311 [IMAGE AVAILABLE]

6. ~~4,379,831~~, Apr. 12, 1983, Process for transferring a pattern onto a semiconductor disk; Ernst Lobach, 430/311; 355/27, 30; 430/273, 325, 326, 327, 396, 950 [IMAGE AVAILABLE]

7. 4,348,105, Sep. 7, 1982, Radiation shadow projection exposure system; Fausto Caprari, 355/67; 353/102 [IMAGE AVAILABLE]

=> M

=> s method? or process?
827975 METHOD?
806935 PROCESS?
L23 1062861 METHOD? OR PROCESS?

=> s two-dimensional? or two(p)dimensional?
1272434 TWO
107686 DIMENSIONAL?
24246 TWO-DIMENSIONAL?
(TWO(W)DIMENSIONAL?)
1272434 TWO
107686 DIMENSIONAL?
39332 TWO(P)DIMENSIONAL?
L24 39332 TWO-DIMENSIONAL? OR TWO(P)DIMENSIONAL?

=> s radiation? or radiation(p)sensitive?
118446 RADIATION?
117413 RADIATION
161524 SENSITIVE?
14157 RADIATION(P)SENSITIVE?
L25 118446 RADIATION? OR RADIATION(P)SENSITIVE?

=> s 123 and 124
L26 33592 L23 AND L24

=> s 125 and 126
L27 6984 L25 AND L26

=> s mask?
L28 71699 MASK?

=>

=> s mask? or mask(p)image?
71699 MASK?
49527 MASK
166841 IMAGE?
8961 MASK(P) IMAGE?
L29 71699 MASK? OR MASK(P) IMAGE?
75% OF LIMIT FOR TOTAL ANSWERS REACHED

=> s 127 and 129
L30 1591 L27 AND L29

=> s rayleigh?
L31 1611 RAYLEIGH?

=> s 130 and 131
L32 20 L30 AND L31

=> s 132 and pattern?
233101 PATTERN?

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=> s 132 and pattern?
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L34 13 L32 AND PATTERN?

=> s 134 and substate?

=> s 130 and substrate?
160503 SUBSTRATE?
L36 894 L30 AND SUBSTRATE?

=> s 136 and 131
L37 6 L36 AND L31

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=> s 430/20-330/cclst
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=> s 138 and 123
L39 15381 L38 AND L23

=> s 139 and 125
L40 6800 L39 AND L25

=> s 140 and 129
L41 2659 L40 AND L29

=> s 124 and 141
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=> s 142 and pattern?
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L43 147 L42 AND PATTERN?

=> s 143 and substrate?
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L44 90 L43 AND SUBSTRATE?

=> s 144 and 131
L45 1 L44 AND L31

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=> s 145 and photoresist?
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L46 1 L45 AND PHOTORESIST?

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